Advanced Research Projects Agency - Energy (ARPA-E)

LANL Town Hall Meeting May 5th, 2009

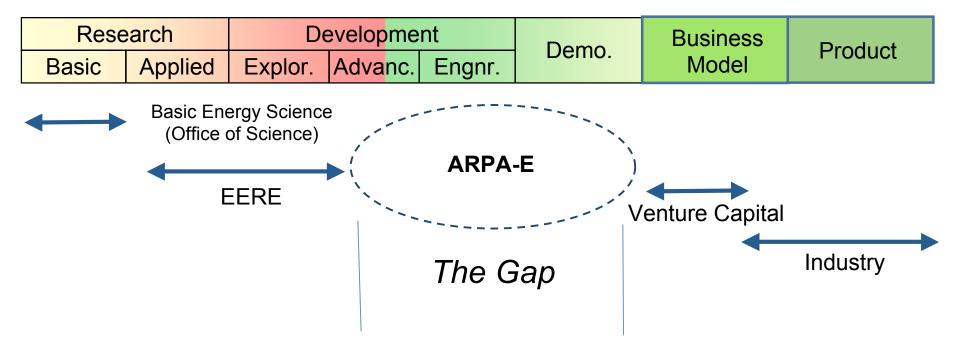
Technology Transfer Division

www.lanl.gov/partnerships/arpa-e





ARPA-E in the DOE Technology Continuum



Technology Readiness Levels

1	2	3	4	5	6	7	8	9
Basic Principles	Technology Concept	Proof of Concept	Component Validation	Field Validation	Prototype Demo.	System Demo.	System Complete	Product in use





What is ARPA-E?

- New organization within the DOE, chartered by Congress, to foster R&D of transformational (not incremental) energy-related technologies
- ARPA-E is part of a broader national energy strategy
- Fund transformational R&D emphasizing high-risk concepts with potential high-payoff
- Create technology breakthroughs in how energy is produced, transmitted, used and stored



ARPA-E Mission Areas

- 1) Enhance the economic and energy security of the U.S. by developing energy technologies that result in:
 - Reductions of imports of energy from foreign sources;
 - Reductions of energy-related emissions, including greenhouse gases (GHG); and
 - Improvement in the energy efficiency of all economic sectors.
- Ensure that the U.S. maintains a technological lead in developing and deploying advanced energy technologies.



What ARPA-E is Not

- ARPA-E purpose is not to support basic research aimed at discovery and knowledge generation for its own sake
- ARPA-E will not undertake large-scale demonstration projects
- Not intended to be a substitute for existing R&D organizations within DOE





ARPA-E Submission Requirements

- Proposal submissions cannot be led by LANL
- Concept papers must be submitted by an external Applicant (company or university) willing to cost-share:
 - 20% for Early-Stage projects
 - 50% for Late-Stage projects
- LANL effort cannot exceed 50% of the total R&D budget



Timeline – Important Deadlines

For Pre-Concept Submission to TT:

MAY 6th - MAY 26th

For Concept Paper to ARPA-E:

MAY 12th - JUNE 2nd 2009 at 8:00 PM (EST)

FOA STRONGLY ENCOURAGES EARLY SUBMISSION

 Rolling deadline for full proposal submission upon invitation from ARPA-E





Graphical Timeline

Please check website often for updates:

www.lanl.gov/source/orgs/tt/arpa-e/index.shtml

Pre-Concept Submissions:

ARPA-E@lanl.gov May 26th Last Day for TT to Process June 2nd 8 PM (EST) May 12th Pre-concepts for **End of Concept Paper** Beginning Date for Submissions Submissions to ARPA-E Concept Paper Submissions to ARPA-E Concept **Full Proposal** Pre-Concept (Earlier the Better May 6th - 26th 90 Days after June 13th Pre-Concept First Proposals may be Submission to TT funded by ARPA-E June 13th First Proposals may be selected by ARPA-E

Estimated Funding Levels

- Most awards will be for total project costs in the range of \$2M - \$5M over 24 – 36 months
- Some may be as low as \$500k or as high as \$10 million
- Initial ARPA-E Call: \$150 million



Applicant Minimum Requirements

- Willing to partner
- Cost-share
 - Private vs. federal funds
- Complete all registration requirements
- Be responsible for proposal submission





LANL PI Actions

- Identify / collaborate with a partner to develop technical content for the Concept Paper
- Estimate budget for LANL effort
- Identify Background Intellectual Property (BIP)
- Submit Pre-concept Information to TT beginning May 6th thru May 26th





ARPA-E Elements for Success

TT Value

- Institutional coordination
- IP Management
- Assist PIs with partner interactions
- Assist Applicants with ARPA-E submission requirements (as needed)

Submit Pre-Concept Information to TT and Submit Concept Letter of Commitment to Applicant

Current understanding of relevant Intellectual Property (IP) position

Line management buy-in

Qualified collaboration partner(s)

Transformational energy concept





IP Issues

 Preliminary Guidance: Field Work Proposals (FWPs) will govern contractual participation and LANL IP

TT anticipates further guidance from DOE regarding IP rights





Final Practical Messages

- If you have not yet identified a cost-share partner, it is likely that you are not ready for this call
- NDA may be required by company prior to detailed technical discussions
- IP questions unknowns are being worked
- IP plans addressed with appropriate mechanisms
- FWP submission required with full proposal submission
- Stimulus reporting required if project is funded



ARPA-E Mechanics & TT Resources

- TT Contacts:
 - Laura Barber, libb@lanl.gov, 7-9266
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Q&A



